



**NOAA Teacher at Sea**  
**David Babich**  
**Onboard NOAA Ship FAIRWEATHER**  
**July 5 – 14, 2005**

**Mission: Hydrography**

Day 9: Tuesday, July 11, 2006  
Shumagin Islands, Alaska

**Weather Data**

WX Cloudy, fog  
Wind NW 25kts  
Sea 8ft  
Temps 50's

**Science and Technology**

Today was the last full day of hydrography before heading back to port. The ship planned to take full advantage of the time. Starting off at 8:15, the small Ambar boat aboard the FAIRWEATHER was launched. The Ambar is about 20 feet long with a shallow reinforced hull to make it ideal for getting even closer to shore than the survey launches. The Ambar's mission is to check for hazards close to shore that were previously detected.

While the Ambar is out working the coastline, the FAIRWEATHER continued surveying in the deeper water, making it a very productive day.



The Ambar boat leaves the FAIRWEATHER for the shore.

The Ambar boat heads out to see if certain hazards detected by LIDAR were accurate. Several days ago, the FAIRWEATHER welcomed aboard a senior hydrographic surveyor, James Guilford, from the Tenix LADS Company. He was here to support his product – LIDAR. NOAA works with several independent companies that uses a

different hydrographic technology called LIDAR. LIDAR is a laser that is used from planes rather than boats. These planes generally fly at between 1,200 and 2,300 feet along mainly coastline, to survey those difficult areas that are hard to reach by boat. The LIDAR can generally reach water depths of 20-25 feet and can be used 24 hours a day. The only drawback is that the LIDAR has trouble penetrating the water surface when there are obstructions like heavy kelp areas or whitewater. However, between data collect from the boats and planes, NOAA can create a very complete survey of an area.

### **Personal Log**

I have been amazed at how smoothly the ship operates 24 hours a day. It can be a bit overwhelming watching the crew head to their posts and rotating through the mess hall throughout the day. At first, I found life at sea a bit of an adjustment, but then you fall into a routine and it becomes easier. As a visitor to the ship, it can be a bit hard because you have no set role. Those crew members new to the ship that have a specific job seem to quickly adjust. I don't know if I would ever make a very good sailor, but it is fun to get a little taste of what it is like at sea.

### **FAIRWEATHER Profile: Commander Andrew Beaver**



Commander Beaver stands next to a coast guard rescue helicopter at their base in Kodiak, Alaska.

The FAIRWEATHER recently underwent a change of command. Commander Andrew Beaver officially took command in June of 2006. The FAIRWEATHER is fortunate to have been assigned such an experienced commander. However, you would never have expected it based on his upbringing.

family raised corn, soybeans, and pigs. In fact, he could easily have followed his father's footsteps and become a farmer. However, he went on to Iowa State where he graduated

Commander Beaver was born and raised on a 180 acre farm in Iowa, where his

from Agriculture Engineering. After graduating, jobs were not readily available, so Commander Beaver pursued the NOAA corps. It provided many unique opportunities and he took to life on a ship right away.

Before joining the FAIRWEATHER, Commander Beaver was assigned to a variety of posts including service with the NOAA Diving Program office, Navigation, Field Operations and Executive officer of the WHITING, and also Commander of the NOAA ship RUDE.

Commander Beaver and his family are delighted to be here in Alaska. Everyone is very nice and his home port in Ketchikan even reminds him of the small towns in Iowa where he grew up. His family loves the beauty and wildlife of Alaska. He feels it's a wonderful place to bring up a family.

He is enjoying the new challenges of his new job and getting to know the ship's crew. The surveying has been different because the coastline is sheerer in Alaska, whereas on the east coast it tends to be more gradual. He loves the fact that there is a lot less boat traffic on the water and that the remoteness of his survey work forces the ship to be more self-sufficient.

NOAA provides employees a variety of opportunities. Commander Beaver always enjoyed knowing that every 3-4 years he can move on and try something different. He would encourage any student interested in the math and sciences to look into employment opportunities like those found with NOAA. NOAA allows you to "make a difference in the world" and you would be "doing something that your parents and grandparents would be proud of"!